



Tropical Storm Harvey 2017 9/2/2017 – 1700 CDT Update

TEXAS

On September 2, 2017, FEMA approved the State of Texas' request to amend the cost waiver for response effort funding. The waiver decreases the cost share from 30 days from the date of the Presidential Declaration, the cost share has been decreased to 0%, except for debris recovery, which was decreased to 10% for 30 days from the date of the Presidential Declaration.

FEMA's Joint Field Office (JFO) opened as of September 2, 2017. EPA Region 6 has two Liaison representatives stationed at the JFO which is located in Austin, Texas.

ARKEMA FIRE

As of 8:00 am on September 2, 2017, three trailers reacted and caught fire at the Arkema facility. One fire occurred on August 31, 2017 and the second occurred on September 1, 2017. During the fire on September 1, 2017, EPA's ground air monitoring results outside of the exclusion zone were approximately 0.3 parts per million (ppm), below levels of health concern. The fire subsided by 6:30 pm and by 7:30 pm.

Additional Updates:

- Unified Command has determined that access to the facility is still unsafe and a 1.5-mile evacuation radius will remain in effect until further notice.
- Aerial reconnaissance photos indicate that flood waters within the facility have receded significantly.
- At the request of the local jurisdiction and Harris County Pollution Control, EPA collected surface water runoff samples downstream of the facility at 4 locations near a residential area. The samples are being analyzed by EPA's mobile laboratory.
- EPA will continue to maintain a 24-hr presence with air monitoring capabilities at the incident command operations center.
- Unified Command at the Arkema site continue to coordinate with the EPA Region 6 Environmental Unit to determine locations on the site where flood water samples should be collected.

BEAUMONT

The City of Beaumont's water system anticipates being at half capacity, ten million gallons per day, by noon September 2, 2017. The elevated storage tanks and groundwater tanks are mostly full and are currently valved-off until the system is brought back online. The City of Beaumont will be on a boil water notice when it goes on-line. EPA is maintaining contact with TCEQ and will provide assistance as requested.

The City has their Emergency Operations Center (EOC) fully functional and is coordinating efforts to make repairs and acquire chemicals and materials for both short-term and long-term.

TCEQ will be sending four teams deployed to survey the area. Water pressure in the city of Beaumont water system is increasing; however, due to the previous low pressure in the system the city continues to be under a boil water notice.

On September 2, 2017, the TCEQ Water Supply Division received the following status update for the City of Beaumont Water Treatment Facilities from Barry Miller, Water Treatment Manager:

The groundwater plant remains off-line due to flooding conditions. The surface water treatment plant (SWP) is producing 20 MGD. Water is being sent to limited sections of distribution at this time due to the inability to maintain pressure in the distribution system. Operators are slowly opening main distribution lines and determine where pressure is being lost so repairs can be made. This will be a slow, methodical process to bring the entire system up to desired pressure.

The raw water pumps are out, and estimated to remain out of service for 2-3 weeks. Crews are currently on-site laying additional pipe and installing additional pumps to bring raw water directly from the Neches River into the SWTP. The estimated demand will be above 20 MGD. It is estimated that the full capacity will take longer to determine due to leaks in the distribution system. The elevated storage tanks and groundwater tanks are mostly full. The City of Beaumont will be on a boil water notice when it goes on-line.

Additional current status:

Chemical and fuel deliveries are expected to resume as roads begin to open in the next few days.

The City has their Emergency Operations Center (EOC) fully functional and is coordinating efforts to make repairs and acquire chemicals and materials for both short-term and long-term.

PORT ARTHUR

As of September 2, 2017, the USCG Port Arthur has begun to shift from search and recovery to marine environmental response. A mobile command post has been established. USCG teams are conducting shoreline assessments.

FIELD RESPONSE ACTIVITIES

LOUISIANA

As of 6:00 pm on September 2, 2017, the Louisiana State Emergency Operations Center (EOC) will no longer be fully activated. Only those agencies dealing with sheltering will be required to remain at the EOC. All other agencies are to remain on standby.

The State of Louisiana has received an Emergency Declaration (FEMA-3382-EM) for Cat. B that includes a total of 12 parishes: Allen, Acadia, Beauregard, Calcasieu, Cameron, Iberia, Jefferson Davis, Natchitoches, Rapides, Sabine, and Vermillion, Vernon (See map below)

CORPUS CHRISTI

On September 1, 2017, EPA deployed two container recovery teams to collect orphaned containers where hazard evaluations have been completed. Six oil discharge assessment teams consisting of US Coast Guard and Texas General Land Office are conducting reconnaissance in the area. Four TCEQ water infrastructure teams are conducting drinking water and waste water assessments. Two teams are conducting air reconnaissance via helicopters.

In Alpha Branch the Orphan Container Recovery Group consisting of four teams, conducted orphan container recovery in Port Aransas. Containers which have been displaced and are leaking as a result of the hurricane are being identified and recovered utilizing the NDOW Orphan Container Hazard Evaluation SOP and documented using Response Manager. Teams 1 and 2 currently consist of TCEQ, CST and a TCEQ contractor. Team 3 is a special Ops team which is recovering orphan containers with a high degree of hazard associated with them. Team 3 is comprised of EPA, USCG and an EPA ERRS. Team 4 is a strike team which is investigating Hurricane Harvey related NRC, State and Local Reports. Team 4 Consists of EPA and an EPA ERRS.

The Water Infrastructure Assessment Group consists of four teams who are conducting assessments for both Drinking Water and Waste Water Facilities. Teams are prioritizing facilities, and conducting evaluation of these facilities. Teams are utilizing the NDOW Water Infrastructure Evaluation SOP and documenting target utilizing Response Manager. Teams 1 and 2 consist of TCEQ personnel and Teams 3 and 4 consist TCEQ and CST personnel.

The Hazard Evaluation Group consists of two teams performing orphan container hazard evaluation. Teams are prioritizing Rapid Needs Assessment Targets and conducting evaluation of the targets. Teams are utilizing the NDOW Orphan Container Hazard Evaluation SOP and documenting targets utilizing Response Manager. Teams consist of TCEQ and CST personnel.

The Oil Discharge Assessment Group consists of 5 teams. Three ER Teams respond to reports of active pollution discharges and conduct patrols as tasked. There are two Oil Discharge Assessment Teams conducting assessments and responding to spills from Port Aransas to Corpus Christi and from Fulton to Ingleside. All teams are conducting hazard evaluation and

damage assessment, and collecting information on damaged and sunken vessels and populating Response Manager.

There is also a Staging Group that is receiving, processing, categorizing, bulking and disposing of any and hazardous containers.

ASPECT is assessing Department of Homeland Security (DHS) critical infrastructure (e.g. public water supplies and wastewater treatment facilities), Risk Management Plan (RMP) and Facility Response Plan (FRP) facilities for damage and immediate ongoing releases.

On Friday, Sept. 1, EPA's ASPECT surveillance aircraft flew through the fire at the Arkema plant in Crosby, Texas. The aircraft monitored for any airborne toxic chemicals, however, preliminary analysis of data showed that although the fire generated intense smoke, no high levels of toxic chemical were detected. The fire subsided by 7:30 p.m. EPA's ground air monitoring results outside the exclusion zone were below levels of health concern. ASPECT will continue periodic air monitoring, and at the request of the local jurisdiction and Harris County Pollution Control, EPA collected surface water runoff samples downstream of the facility. EPA will continue to maintain a 24-hour presence at the incident command operations center.

EPA personnel deployments to Austin, Beaumont-Port Arthur, Houston and Corpus Christi will continue throughout the weekend. Personnel will be supporting the Unified Command teams that are identifying and evaluating impacts of the hurricane and floods, as well as coordinating with TCEQ to assist with priority drinking and waste water assessments. EPA is working with TCEQ to issue a statement on the hazards of floodwaters. Assisting drinking water and waste water facilities in maintaining and/or resuming their operational status remains a high priority.

HOUSTON

Aerial Recon teams are being formed for the next operational period. It is anticipated these teams will be placed in Bravo Branch.

The Orphan Container Hazard Evaluation Group consists of 7 teams. Team compositions include personnel from the EPA, USCG, TCEQ, TGLO, and CTEH. The group's primary purpose is to conduct orphan container hazard evaluation throughout Branch Bravo's geographical area. The targets are being evaluated via the NDOW orphan container hazard evaluation SOP and documented within Response Manager.

The NRC/Investigation Group consists of one team. The team composition is currently two EPA members. The group's primary purpose is to investigate any NRC reports within the Branch Bravo's geographical area.

The Oil Discharge Assessment Group consists of 5 teams. Each team has three members and includes personnel from the EPA, USCG, TCEQ, and CTEH. The group's primary purpose is to conduct oil discharge assessments throughout Branch Bravo's geographical area. The targets

are being evaluated via the NDOW Facility/Vessel Oil Discharge Assessment SOP and documented within Response Manager.

The Orphan Container Recovery Group consists of 2 teams. Each team has three members and includes personnel from USCG, TCEQ, and an OSRO. The group's primary purpose is to conduct orphan container recovery throughout Branch Bravo's geographic area. If not recovery already documented targets, the Orphan Container Recovery Group will utilize the NDOW Orphan Container Hazard Evaluation SOP and document targets within Response Manager accordingly.

Table One. Hazard Evaluation Summary as of 11:00

Status	Alpha Total Count	Bravo Total Count	NRC Total Count
Access Denied (Open)	0	0	0
Assessment Required (Open)	11	20	2
Item Recovered (Closed)	21	0	0
Leave in Place (Closed)	3	4	0
Leave in Place (Open)	0	6	0
Recovery Required (Open)	18	18	1
Refer to Other Agency, no EPA needed (Closed)	1	1	0
Refer to Other Agency (Open)	1	0	0
Special Operations (Open)	0	0	0

Table Two. Release/Discharge Summary as of 11:00

Status	Alpha Total Count	Bravo Total Count	NRC Total Count
Access Denied (Open)	2	2	0
Assessment Required (Open)	538	23	16
Clean Up Completed (Closed)	4	0	5
Clean Up in Progress (Open)	5	11	10
Discharge Identified Clean Up Not Initiated (Open)	19	8	10
No pollution Threat (Closed)	54	2	1
Refer to Other Agency (Open)	3	0	0

Table Three. Drinking Water Treatment Facility Assessment Status as of 11:00

Drinking Water Facility Assessment Status	# of Contact on 9/2/17	Cumulative
Clear	0	66
Destroyed	0	2
Operating on Generator Power	0	32
Inoperable	0	137
Loss of Power - No Generator	0	89
Operating	88	1555

Out of Contact	0	108
Results of Testing Pending	0	25
Unknown	0	292

Table Four. Waste Water Treatment Facility Assessment Status as of 11:00

Waste Water Facility Assessment Status	# of Contact on 9/2/17	Cumulative
Inoperable	1	53
Operating	6	1726
Operating on Generator Power	0	41
Partial Operations	1	39
Needs Site Visit	0	2
Out of Contact (No Response)	0	35
Unknown	13	112

SPILL/RELEASE RESPONSE

Hotline Calls as of September 1, 2017	
Number of Harvey Related Calls Received During Reporting Period 0100 to 1300 hr.	5
Total Number of Harvey Related Calls to Date	120
* EPA is assessing each call to determine appropriate response and forwarding reports to field personnel to conduct further assessments and response as needed.	

DRINKING WATER / WASTEWATER ASSESSMENTS

EPA continues to support TCEQ in contacting drinking water and waste water systems. EPA deployed 10 personnel to assist TCEQ's Drinking Water and Waste Water Phone Bank located in Austin.

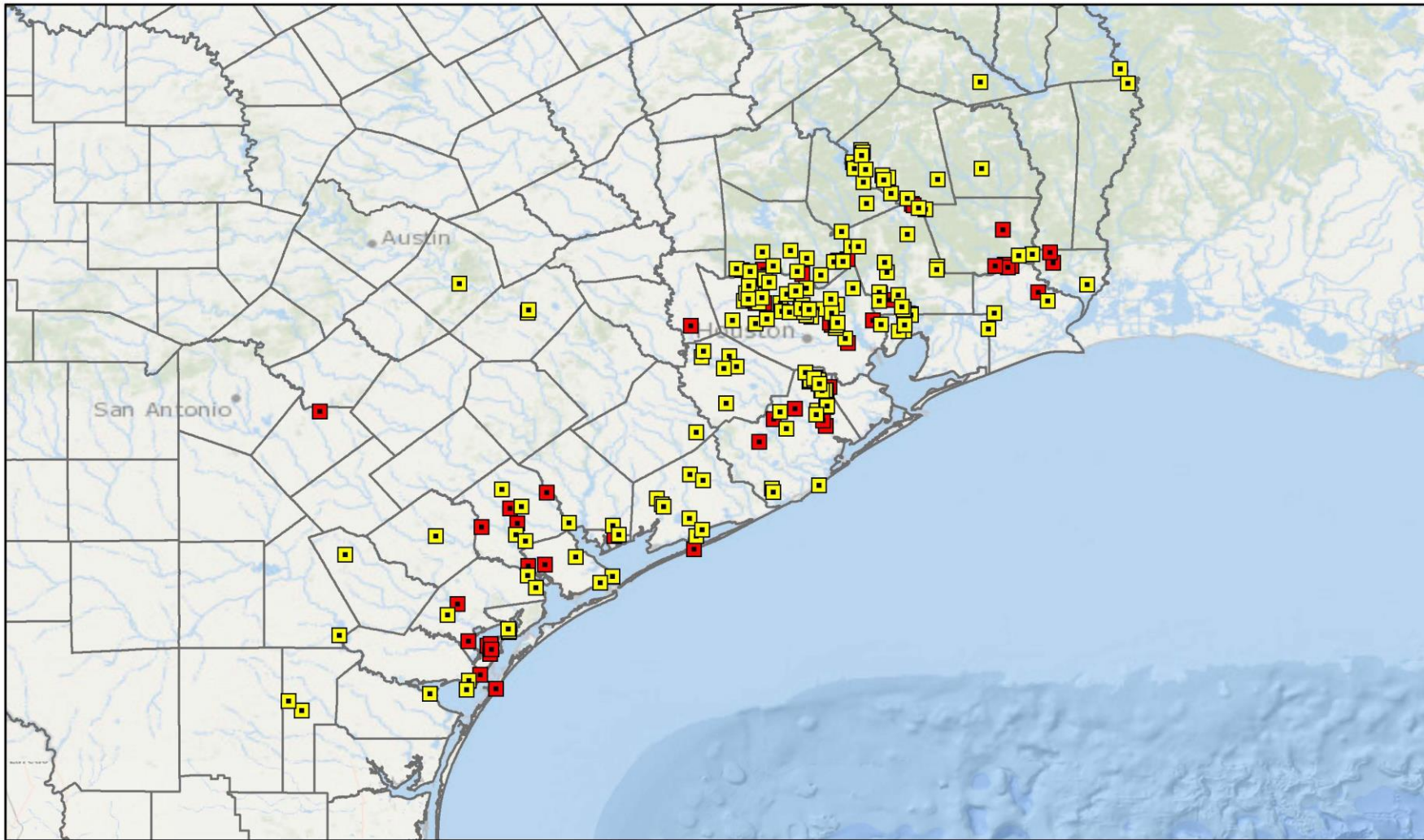
DW - Total # of Systems: 4512

STATUS	NUMBER OF SYSTEMS
Contact Pending	159
Bacteria Sample Results Pending	16
Out of Contact	16
On Generator – Lost Pressure	14
No problems	1435
On Generator – Never Lost Pressure	16
No Status	2680
Lost pressure & or Treatment	61



Lifted boil water notice due to negative bacteria samples. Normal Ops resumed	63
System Destroyed	2
Not Operating	50

WW - Total # of Systems: 2469

STATUS	NUMBER OF SYSTEMS
No Problems	1626
System Destroyed	2
Unknown	678
Waste Water Treat. Plant and/or Collection on Generator or bypass pumps for Lift Station	30
Waste Water Treat. Plant and/or Collection non operational no Sanitary Sewer Overflow	35
WWTP and/or Collection Partially Operational Sanitary Sewer Overflow	32
Site Visit Needed	1
Out of Contact - phone evaluation only	14
Contact Pending - Phone evaluation only	51

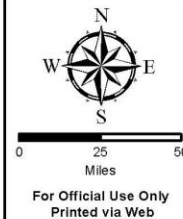


Legend

-  Boiled Water Notices (173)
-  Water Outage (49)

US EPA Region 6

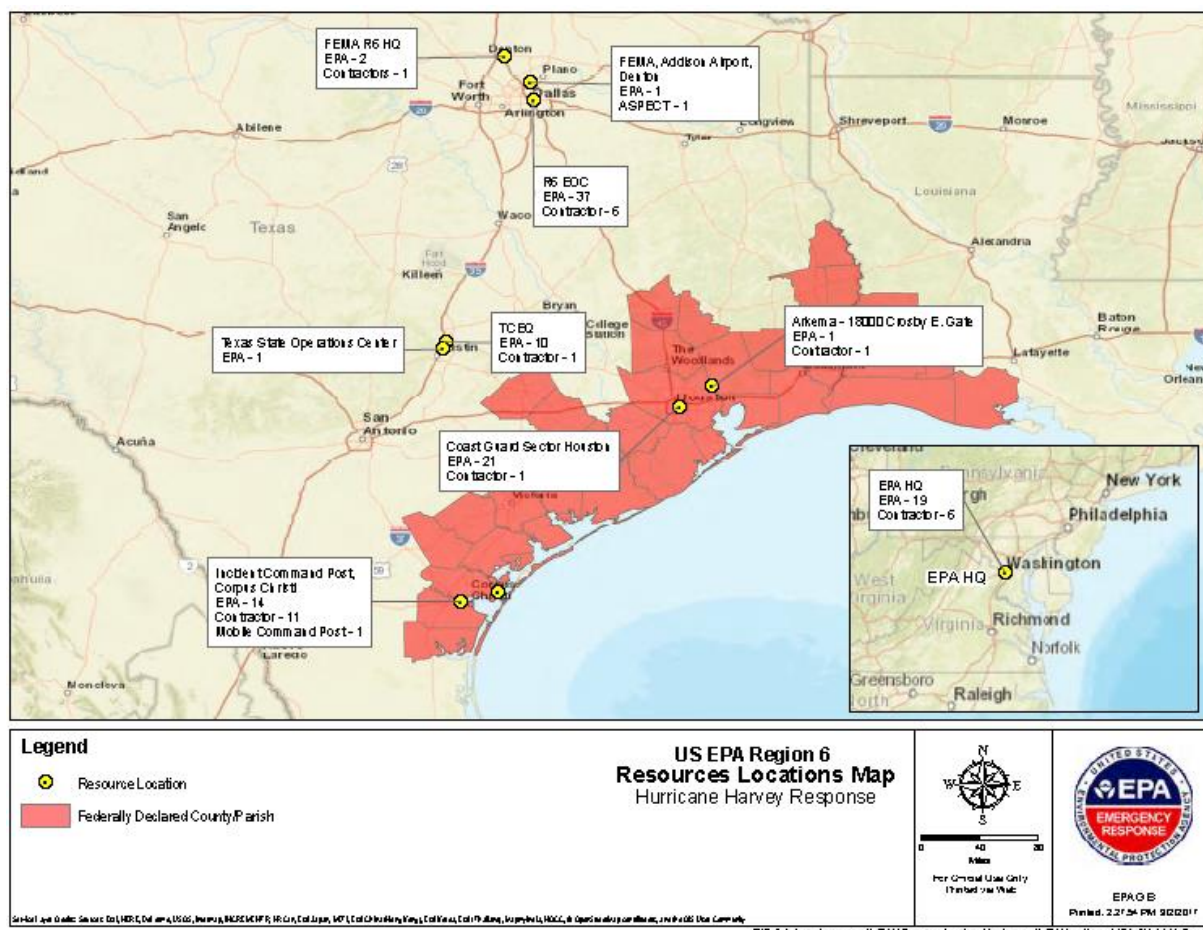
Drinking Water Status Map 09/02/2017 - 0100



EPA GIS
Printed: 2:35:09 AM 9/2/2017

RESOURCES

Personnel	EPA Dallas, TX	FEMA Denton, TX	Texas SOC Austin, TX	TCEQ Austin, TX	Houston, TX	Corpus Christi, TX	HQ EOC Wash DC	Totals
EPA	36	1	2	10	9	13	19	84
START	5			1	1	5		12
ERRS						6		6
Other Contractors	1						6	4
TOTAL	42	1	2	11	10	24	25	106



FUNDING

SEPTEMBER 1, 2017

Funding Sources	Funding Ceiling	Funding Ceiling Less Indirect	Spent to Date	Remaining Balance	Daily Burn Rate
Non Mission Assignment	N/A		\$64,200.00	\$0.00	
MA 4332DR-TX-EPA-01	\$20,000.00	\$17,654.00	\$0.00	\$17,654.00	
MA 4332DR-TX-EPA-03	\$8,592,000.00	\$7,584,077.00	\$1,759,127.00	\$5,824,950.00	\$90,233.84*
Totals:	\$8,612,000.00	\$7,601,731.00		\$7,601,731.00	

*Burn rate does not include daily ERRS amounts, not yet received. The burn does include START & ASPECT

** Indirect costs represent the money the Cincinnati Shared Service Center takes off the top to manage the Mission Assignments

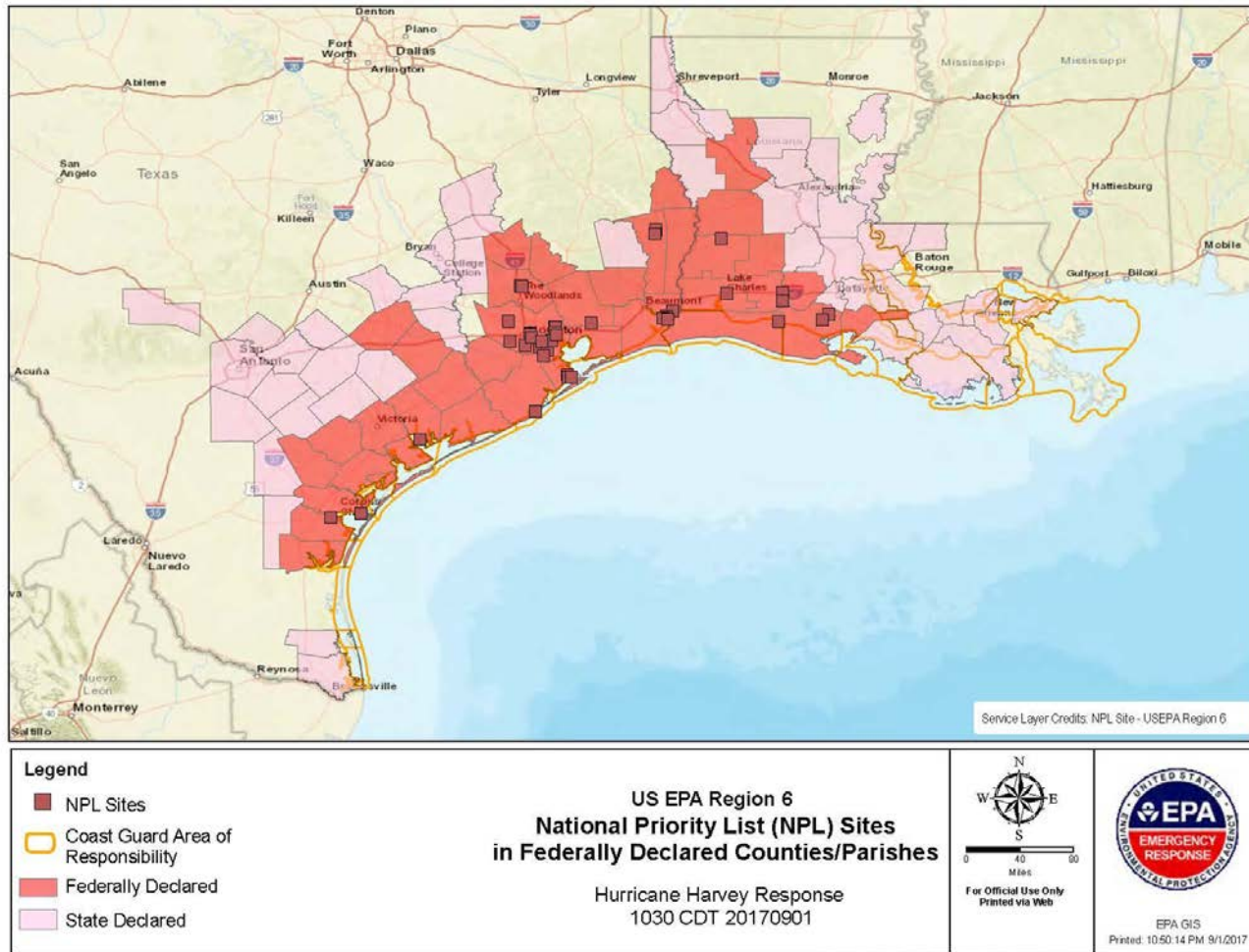
REFINERIES/FUEL WAIVERS

Four No Action Assurance (NAA) letters were signed by EPA yesterday, September 2, 2017, to help address fuel shortages. Of the 17 refineries along the Texas coast, as of September 1, only 6 have returned to partial operation due to Hurricane Harvey. The following NAAs will help expedite the distribution of existing gasoline supplies in both Texas and Louisiana while the refineries work to re-start and resume normal operations. For each NAA, EPA will exercise discretion not to pursue enforcement for violations of the regulations identified in the NAAs. Each NAA is effective for two weeks, or September 15. It is anticipated that these NAAs will allow for the immediate distribution in Texas of 10 million or more gallons of gasoline to consumers.

- Texas NAA for Vapor Recovery Systems:** Several federal regulations and the Texas State Implementation Plan (SIP) require that bulk gasoline, marine, and rail loading terminals operate a vapor control system to collect the fuel vapors displaced from tank trucks during product loading. This NAA allows the loading and unloading of fuel at terminals that have damaged or inoperable vapor recovery devices or that are otherwise not equipped with such devices.
- Texas NAA for Truck Loading at Petroleum Distribution Terminals:** Several federal regulations and the Texas SIP require that gasoline tank trucks obtain testing and certification that the tank trucks are vapor tight. This NAA allows tank trucks to load and unload fuel at terminals even though the trucks may not be registered with the terminals as having completed all the testing for tank tightness or have the documentation on hand to prove it.

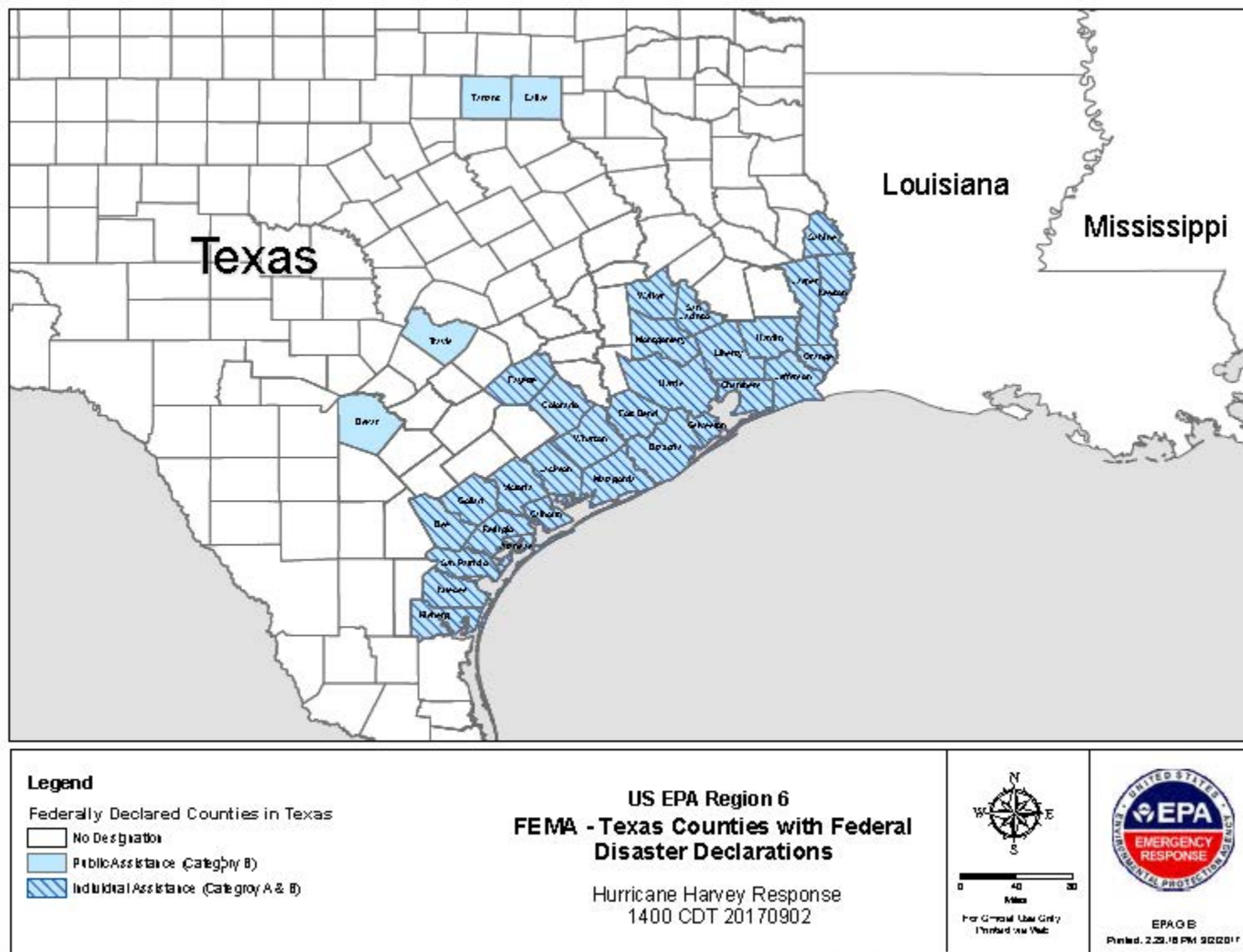
- **Texas NAA for Roof Landings at Gasoline Storage Vessels:** This relates to several federal regulations and the Texas SIP covering storage vessels with external floating roofs. Specifically, when the operator removes product from the vessel such that the roof lands on the vessel's legs, such action must be a continuous motion, i.e. the process of re-filling the vessel must begin immediately after roof landing. This NAA will allow roof landings without requiring immediate re-filling of the vessel.
- **Louisiana NAA for Truck Loading at Petroleum Distribution Terminals:** Several federal regulations and the Louisiana SIP require that gasoline tank trucks obtain testing and certification that the tank trucks are vapor tight. This NAA allows tank trucks to load and unload fuel at terminals even though the trucks may not be registered with the terminals as having completed all the testing for tank tightness or have the documentation on hand to prove it.

SUPERFUND NPL SITES



No NPL site status updates are expected until Tuesday September 4, 2017.

FEMA – TEXAS COUNTIES WITH DISASTER DECLARATIONS



Superfund Sites within Federally Declared Counties			
Hurricane Harvey Rapid Response Assessment	Phase 1	Phase 2	
	Rapid Response Assessment	Site Inspection Needed	Inspected
TEXAS			
SITE NAME			
ALCOA (Point Comfort) / LAVACA BAY	8/29/17	No	
BAILEY WASTE DISPOSAL	9/1/17	Yes	
BRINE SERVICE CO.	8/30/17	Yes	8/3
BRIO REFINING INC.	9/1/17	No	
CONROE CREOSOTING COMPANY	9/1/17	No	
CRYSTAL CHEMICAL CO.	8/30/17	No	
DIXIE OIL PROCESSORS INC.	9/1/17	No	
FALCON REFINERY	8/31/17	Yes	8/3
FRENCH, LTD.	9/1/17	Yes	
GENEVA INDUSTRIES / FUHRMANN ENERGY	9/1/17	Yes	
GULFCO MARINE MAINTENANCE	9/1/17	Yes	
HARRIS (FARLEY STREET)	9/1/17	No	
HART CREOSOTING	9/1/17	No	
HIGHLANDS ACID PIT	9/1/17	Yes	
JASPER CREOSOTING	9/1/17	No	
JONES ROAD GROUNDWATER PLUME	8/29/17	No	
MALONE SERVICES COMPANY	9/1/17	Yes	
MANY DIVERSIFIED INTERESTS, INC	9/1/17	No	
MOTCO, INC.	8/31/17	No	
NORTH CAVALCADE STREET	8/29/17	No	
PALMER BARGE LINE	9/1/17	No	
PATRICK BAYOU	9/1/17	Yes	
PETRO-CHEMICAL SYSTEMS, INC. (Turtle Bayou)	9/1/17	Yes	
SAN JACINTO RIVER WASTE PITS	9/1/17	Yes	
SIKES DISPOSAL PITS	8/29/17	No	
SOL LYNN / INDUSTRIAL TRANSFORMERS	8/29/17	No	
SOUTH CAVALCADE STREET	8/29/17	No	
STAR LAKE CANAL	8/30/17	No	
STATE MARINE OF PORT ARTHUR	9/1/17	No	
TEX-TIN CORP.	9/1/17	No	

TRIANGLE CHEMICAL COMPANY	9/1/17	Yes	
UNITED CREOSOTING CO.	9/1/17	No	
US OIL RECOVERY	9/1/17	Yes	
LOUISIANA			
AMERICAN CREOSOTE DERIDDER	09/01/17	No	
D.L. MUD, INC.	08/29/17	No	
EVR-WOOD TREATING/EVANGELINE REFINING COMPANY	09/01/17	No	
GULF COAST VACUUM SERVICES	08/29/17	No	
GULF STATE UTILITIES (North Ryan Street)	08/31/17	No	
MALLARD BAY LANDING BULK PLANT	08/29/17	No	
PAB OIL & CHEMICAL SERVICE	08/29/17	No	
SBA SHIPYARD	09/01/17	No	
Status Summary			
Rapid Response Assessment Completed	41		
Sites with no further action	30		
Sites in Phase 2	11		

PHOTOS



Tactics Meeting on Sep 2nd 2017



Photos from the TCEQ/EPA Recon flight over Rockport/Fulton on Sep 1st 2017



Alpha Branch Team Three Special Ops. USCG and EPA Members discussing operations.